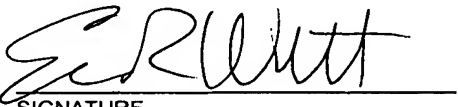


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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>1321.2.83.1</b>  U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/530512</b>
INTERNATIONAL APPLICATION NO. <b>PCT/US03/32765</b>	INTERNATIONAL FILING DATE <b>15 October 2003</b>	PRIORITY DATE CLAIMED <b>15 October 2002</b>
TITLE OF INVENTION <b>HIGH THROUGHPUT DETECTION OF GLUTATHIONE S-TRANSFERASE POLYMORPHIC ALLELES</b>		
APPLICANT(S) FOR DO/EO/US <b>Charles Keller, Linda Ballard, Richard Lemmons, and Francis Ali-Osman</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))                         <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).                         <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))                         <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)), previously filed a copy is enclosed.</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).</li> </ol> <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 25 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information: <b>Certificate of Mailing</b></li> </ol>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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U.S. APPLICATION NO. (If known, see 37 CFR 1.5)		INTERNATIONAL APPLICATION NO. <b>PCT/US03/32765</b>		ATTORNEY'S DOCKET NUMBER <b>1321.2.83.1</b>	
<b>10/530512</b>					
The following fees have been submitted					
21. <input checked="" type="checkbox"/> Basic national fee .....				\$300	
22. <input checked="" type="checkbox"/> Examination fee					
If international preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) .....				\$100	
All other situations .....				\$200	
23. <input checked="" type="checkbox"/> Search Fee					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....				\$100	
International Search Report prepared and provided to the Office .....				\$400	
All other situations .....				\$500	
TOTAL OF 21, 22 and d23 =				\$600	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 pages or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE	
- 100 =	/ 50 =			X \$250	\$
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	24 - 20 =	4	x \$50	\$200	
Independent Claims	2 - 3 =		x \$200	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			x \$360	\$	
TOTAL OF ABOVE CALCULATIONS =				\$800	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$400	
SUBTOTAL =				\$400	
Processing fee of \$130 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property				\$	
TOTAL FEES ENCLOSED =				\$400	
				Amount to be refunded:	\$
				Amount to be charged:	\$
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fee is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 13-0763. A duplicate of this sheet is enclosed. d. <input checked="" type="checkbox"/> Fees are to be charged to a credit card <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
<b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO: Customer No. 21552 MADSON & METCALF 15 West South Temple, Suite 900 Salt Lake City, Utah 84101 United States of America Telephone: (801) 537-1700 Facsimile: (801) 537-1799					
				 SIGNATURE	
				Evan R. Witt NAME	
				32,512 REGISTRATION NUMBER	

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 6, 2005.

  
Attorney for Applicants

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : (not yet assigned)  
Applicant : Charles Keller et al.  
Title : HIGH THROUGHPUT DETECTION OF  
GLUTATHIONE S-TRANSFERASE POLYMORPHIC  
ALLELES  
Filed : April 6, 2005  
TC/A.U. : (not yet assigned)  
Examiner : (not yet assigned)  
Docket No. : 1321.2.83.1  
Customer No. : 21552

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

STATEMENT REGARDING SEQUENCE LISTING

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

This statement is submitted with regards to the sequence listing being filed herewith.  
The paper copy filed in the International Application is identical to the computer- readable form that is also enclosed.

Respectfully submitted,



Evan R. Witt  
Reg. No. 32,512  
Attorney for Applicants

Date: April 6, 2005

MADSON & METCALF  
Gateway Tower West  
15 West South Temple, Suite 900  
Salt Lake City, Utah 84101  
Telephone: 801/537-1700

PATENT APPLICATION  
Docket No.: 1321.2.83.1

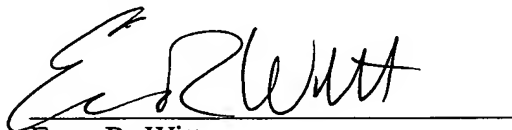
CERTIFICATE OF MAILING BY "EXPRESS MAIL"

"Express Mail" Mailing Label No.: EO908571326US

Date of Deposit: April 6, 2005

I hereby certify that this Transmittal Letter to the DO/EO/US Concerning a Filing Under 35 U.S.C. 371 for a national phase patent application in the name of Charles Keller et al. for HIGH THROUGHPUT DETECTION OF GLUTATHIONE S-TRANSFERASE POLYMORPHIC ALLELES, together with a Declaration, Assignment and Assignment Recordation Sheet, Copy of Sequence Listing on Disk, and a Credit Card Payment Form in the amount of \$400 are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Respectfully submitted,



Evan R. Witt  
Reg. No. 32,512  
Attorney for Applicants

Date: April 6, 2005

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900 Gateway Tower West  
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